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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,429	04/15/2004	Toshihiro Nakamura	251873US-8CONT	6502
22850	7590	10/19/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			STAHL, MICHAEL J	
			ART UNIT	PAPER NUMBER
			2874	

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.F

**Office Action Summary**

Application No.

10/824,429

Applicant(s)

NAKAMURA ET AL.

Examiner

Mike Stahl

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**– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 August 2005.  
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-24 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☒ Claim(s) 3-21 is/are allowed.  
 6) ☒ Claim(s) 1 is/are rejected.  
 7) ☒ Claim(s) 22-24 is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☒ The drawing(s) filed on 03 August 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 4) ☐ Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) ☐ Notice of Informal Patent Application (PTO-152)  
 6) ☐ Other: \_\_\_\_\_.

This Office action is in response to the amendment filed August 3, 2005. Claims 1 and 3-24 are pending.

### ***Claim Objections***

Claim 22 is objected to because the phrase “wherein the crystals are made transparent” should be rewritten as “wherein the core is made transparent”. See the specification at p. 24 lns. 8-9.

New claims 23 and 24 are objected to because in each claim, a percent symbol (%) or the word “percent” should be inserted after “efficiency of 80”.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Kinoshita et al. (US 2002/0027703).

Kinoshita discloses an optical amplification fiber having a gain spectrum with a FWHM of at least 45 nm and a maximum value of power conversion efficiency of at least 80%. See fig. 21 (right hand column), fig. 24, [0155]-[0156], [0190].

***Response to Arguments***

The remarks regarding the rejection of claim 1 based on Kinoshita are not persuasive. The remarks suggest that figs. 21 and 24 of Kinoshita refer to absorption bands rather than a gain spectrum. However, it is noted that the vertical axis of fig. 24 is plainly labeled “gain”, and fig. 21 refers to “excitation bandwidth”. Thus it appears that these figures are referring to a gain spectrum, and the rejection was not withdrawn.

The remarks concerning the rejections based on Zhang et al. or Tran are persuasive at least to the extent that some of the rejected claims were amended to add features or limitations which are simply not shown or suggested by these references. Accordingly the rejections were withdrawn.

***Allowable Subject Matter***

Claims 3-21 are allowed. Claims 22-24 will be allowed pending an amendment to overcome the objections above.

The reasons for allowing claims 10-11 and 19-21 were set forth in the last Office action (mailed May 3, 2005). In that action, claims 7 and 9 were identified as containing allowable subject matter but were objected to as being dependent upon a rejected base claim. New claims 23 and 24 are allowable since they represent original claims 7 and 9 rewritten in independent form. Claims 12-18 are now allowed since the objections made in the last action have been overcome.

Claim 3 is now allowed because it was amended to recite that the total concentration of aluminum doped in the depositing step and the immersing step is not less than 1.5 mass %. As

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applicant pointed out in the remarks, the previously applied Zhang reference discloses only about 0.58 mass % of aluminum. There is no apparent motivation to include more aluminum in the Zhang fiber. None of the other cited references teach or suggest a glass manufacturing method which includes all the steps of claim 3 as amended. Claims 4-9 are allowed by dependence from claim 3.

Claim 22 is now allowable because it was amended to several additional steps which are not taught or suggested by the previously applied Tran reference. None of the other cited references disclose or suggest an optical fiber manufacturing method which includes all the steps of claim 22 as amended.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


US 6906855 was found during a search update and is listed on the attached PTO-892 form for its disclosure of materials with broad gain bandwidths.

Inquiries about this letter should be directed to Mike Stahl at 571-272-2360. Inquiries of a general or clerical nature (e.g., a request for a missing form or paper, etc.) should be directed to the technical support staff supervisor at 571-272-1626. Official communications which are eligible for submission by facsimile and which pertain to this application may be faxed to 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJS

Mike Stahl  
Patent Examiner  
Art Unit 2874

October 12, 2005

  
Sung Pak  
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AU 2874